CAPTAIN JAMES DOUGLAS WARREN, VICTORIA, B. C.
JULY 31, 1895.

(Interviewed by Wm. Wakeham and Richard Rathbun).

Has been here about 37 years.

- Q. How much have you done in the fishing line during that time?
- A. I have not done a great deal in the fishing line, excepting seal and dog.
- Q. We are inquiring particularly about the fisheries in waters continguous to the United States and Canada with respect to the uniformity of protection on the border waters, and we have been pretty thoroughly over Fraser River and adjacent points, and we want to learn something about the salt water; the salmon and the other fishes which are of any particular importance.

 Do you know much about the salmon in the salt water here?
- A. Well, I could hardly say. Of course salmon we know very little about until they come into the rivers, but they go more or less into all the bays and harbors around the country.
 - Q. How do the salmon come in that go into

the Fraser River?

- A. Oh, they strike and follow up into the Straits. I dont think they are very long after they strike on the coast before they get up to the Fraser River. I think they travel very fast. In the winter they appear to stay around more; what we call the spring salmon. They are around here quite a long while -- until later the sockeye run comes in.
- Q. Have you any ideas about the salmon in the fresh waters at all; in regard to the methods of capture and the like; what restrictions should be placed upon them?
- A. No, I would know very little about it.

 I was interested somewhat in some canneries
 some years ago.
- Q. What are your salt water fishes that are of importance or may become so soon?
- A. Well, I suppose our principal fish here would be the halibut. There is considerable cod too. Of course I dont think the cod is as numerous here as farther north.
 - Q. Are they as large here?
- A. Well, the true cod I dont think they are as large.

- Q. What is the distribution of the halibut here; where do they occur?
- A. All over these banks, you will find them everywhere.
 - Q. Inside and out?
- A. Oh, principally outside. There are lots inside as you go to the Queen Charlotte Islands.
- Q. What kind of bottom does the halibut want?
- A. Well, I could hardly say. The ground they are on must be pretty much sandy I should say.
- , Q. How long have they been fishing for halibut?
- A. Oh, they have done some fishing off and on for -- ever since I have been in the country.
 - Q. Do you mean white men?
- A. Well, by spurts; not to follow it up.

 Of course the natives have been fishing, the

 Lord knows how long. They were catching lots

 of them when I came here. Wherever they can

 get a bank they will catch halibut. The cod;

 well, there appears to be a great deal of these

black cod; they are very fat.

- Q. Is it possible to do anything with them in the way of preparing them?
- A. I think on account of their fatness they find it a great deal of trouble to cure them so they will keep good. I don't think they have gone into that properly; some parties started in and rather made a failure, and so gave it up. The parties that went in did not have much means anyway. But they are very plentiful off outside Queen Charlotte; about 200 fathoms of water where they get it.
- Q. It would not be possible to bring them in from there fresh of course?
- A. I don't know why not. They would have to use ice I suppose in that case. They catch a good many in the inside channels also.
- Q. Do you consider that there is a future for the black cod?
- A. Well, I used to think so. They are certainly a fine fish, and it looks to me they are a fish that should get a market if they are properly cared for.
- Q. We have heard that they have been salted as well?

A. Yes, but I dont think they kept, from what I could hear, not any length of time, as there is something wrong in their curing them.

Wakeham: - Are they fatter than salmon or mackerel?

- A. I don't know as they are fatter than spring salmon. Spring salmon are pretty fat, but those are very fat right under the skin; that is the black cod.
- Q. Do you think it would be possible to cure them as they cure cod fish?
- A. Well, they appear to think not, on account of their fatness, that is the difficulty With ice I should think they could be cured all right. There is no doubt they would can them as they do salmon if they only had a market.

 I dont think there is any of them ever propected properly for the true cod here. They find them in different places along the coast, but I dont think any person has really ever properly prospected for them.
- Q. We know, of course, that they do occur in this region, even inside.
- A. Oh, yes; even inside they are caught sometimes.

- Q. But you cannot expect a fishery to build up too fast, of course.
- A. Oh, no; it takes time. They must get a market and put up according to their market. I think those parties that put up the black cod they did not get a market right away and they had to keep their fish some length of time they did not keep it up. There was probably too many put on the market at once. It is like these eulachon we get north, you send them into a place where they are not know and people will not look at them.
 - Q. Is that a fish that has a future?
- A. Well, yes; I should say so. It is only a very short season we can get them; along in March. They do get some in the fall, I think, but that is really the run.
 - Q. Are they generally distributed?
- A. Well, no; the bulk of them go to the Naas River. They get some in the Fraser and some in Knights Inlet, but the bulk of them go to the Naas River.
- Q. They dont catch them in the salt water?

- A. No; not that I know of.
- Q. What is the general preparation of those for sending to market?
- A. Salting. They salt numbers of them.

 The natives catch them to try out the grease.

 They dry them some and smoke them.
 - Q. And use them for candles?
- A. Well; they are called candle fish. They will burn on account of being so fat.
 - Q. Do they burn?
- A. I don't think they will burn like a candle, but they are so fat they will burn.
 - Q. By lighting them with a match?
- A. Well, I don't know as a match would light them. I think it would take a little more fire to start them. They call them the candle fish because they are so fat, and they are very tender. In cooking them if you put them in a pot and boil them they will come out broken up. You want to lay them in a cloth with the heads and tails all nicely laid in regular order, and they will come out whole.
- Q. Would not some other method of cooking be better for them?
 - A. I dare say, but that is the common

method that is done here to keep them from breaking up.

- Q. We heard something about the relations of the eulachon to the sturgeon; that they go up about the same time the sturgeon do?
- A. Well, I don't know just what time they go up the Fraser River, but in the Naas River where the bulk of them is they go about the 10th or 15th of March; that is the regular time.
 - Q. Do they go up to spawn?
 - A. Yes, sir.
 - Q. How long do they remain up the river?
- A. I dont think the run lasts over 3 weeks.
 - Q. And they come right down again?
- A. Well, I expect they do; I hardly know what becomes of them. They catch them going up.
- Q. You dont know that they die off like the salmon?
- A. No; I think there are such immense lots of them go up there that they can hardly die out.
- Q. What is the herring as a commercial fish here?

- A. Well, the herring here are very small.
- Q. What are they good for; are they good for food?
- A. Oh, yes; but they are no comparison to the eastern herring.
- Q. Have they the same flavor and delicate flesh as the eastern herring?
- A. Well, I dont think they are as fat or as good a fish as a rule.
- Q. Do they exist in the same quantities as on the eastern coast?
- A. There appears to be lots of them here sometimes.
 - Q. What direction do they come from?
- A. Well, I could hardly say whether they come from the north or south.
- Q. How are they distributed through this region?
- A. Oh; they come in all parts. Well, there are places -- bays and places -- where they run in and spawn.
 - Q. What is the season for the herring?
- A. The season would be along about March or April.

- Q. And they are caught very little at other times of the year?
- A. I dont think they amount to much at any other time.
 - Q. They are your bait fish here?
 - A. Yes, we use them very much for bait.
 - Q. And you have the dog fish?
 - A. Yes, we have them pretty numerous.
- Q. Those are not a nuisancehere when you can make such good use of them?
- A. Yes, we catch lots of them. Oh, yes; they all have their uses.
- Q. What do you think of catching off so many of them for oil?
 - A. What; not holding out?
 - Q. Yes.
- A. Well, I don't know that they are getting any scarcer at all. There appears to be lots of them.
- Q. You dont know as they ought to be abundant?
- A. No, I think they are pretty destructive on other fishes.
 - Q. Have you the capelan here too?
 - A. Capelan? I dont know. What is that?

- Q. You have the smelt?
- A. Yes, we have the smelt; but what is the capelan?
- Q. It is a little fish about the size of the smelt; perhaps a little larger than your smelt here and rather darker in color.
- A. I remember the name well enough, but I dont just remember the fish.
- Q. How old were you when you left the other side?
 - A. I was only 19.
- Q. Are there any other fishes that are regarded as commercial here?
- A. No; I dont hardly think it. There is no mackerel here. There is a little fish they call mackerel, but it is not mackerel.
- Q. What is the fish they call mackerel here?
- A. I don't know; it is some kind. It resembles a mackerel some, but it is much lighter in color.
 - Q. Does that occur abundantly here?
- A. No; I dont think they are very plentiful at all.

- Q. You have plenty of crabs and shrimps?
- A. Yes, there are a good many crabs, and there are shrimps too.
 - Q. And clams?
 - A. Yes: lots of them.
 - Q. Why dont they use clams as bait here?
- A. I suppose they consider the herring are easier got. They say we want to get in a lot of herring and salt it down for bait, and sometimes they use salmon for bait.
 - Q. Use a whole salmon?
 - A. Yes; cut them.
- Q. Would not take merely the offal of the salmon?
- A. No; they catch the salmon for that purpose, but they will not do that if they can get the herring.
- Q. What is the fishing season in the sea here ordinarily? Do they fish much in the sea during the salmon runs? That is to say, are practically all the fishermen at work on the salmon when they are running?
- A. Oh, they do pretty much. I suppose they can catch the fish, though, all the time if they wish to. The salmon is the best work

when they have salmon, and they, of course, follow that.

- Q. Now, the halibut; do they fish for them during the summer at all extensively?
 - A. Well, not extensively.
- Q. What is the chief halibut fishing season?
- A. Well, they catch the halibut chiefly in the winter time. I suppose the reason of that is, taking more of them and the time of year they can get a market for them.
- Q. Of course, they are mainly shipped away?
- A. Yes; there is no use for them to ship them east when they can get plenty over there, because it would not pay them.
- Q. Have you ever been up the rivers at all; to the headwaters of any of these rivers during the time the salmon are up there?
 - A. No. I have not.
- Q. Do you think the salt water fisheries require any regulating at all; any protection at this time?
- A. Well, I don't know I am sure; not at present anyway; the market regulates them.

- Q. With the salmon is there any regulation regarding them necessary besides what there is now?
- A. Well, I thirk they require all they have got at any rate. Fishermen are very apt to try to work all their time.
- Q. They have a weekly close season and a yearly close season, and, of course, every fisherman has to obtain a license, but the numbers are not limited.
- A. Of course there is danger they may spoil their salmon business.
 - Q. The Columbia River is rather a lessen.
- A. Yes; and these rivers will follow them too, if they are not careful. It is natural for a man who has a cannery to get all the time he can, and he hurts himself in the long run too.
- Q. That is especially so, as the runs are comparatively short; the fishing is done in a limited time, and if they dont make anything during that time they dont at all.
 - A. Certainly.
- Q. How long have you been interested in the fur seal, Captain?
 - A. Oh, I commenced the fur seal business

about 1868.

- Q. Were fur seals as abundant then as now?
- A. Oh, I think so. I dont think there is much difference in them.
- Q. Have you ever formed any opinion about the habit of throwing the offal in the water; salmon offal?
- A. Well, no; I could not say. I dont know that it would do any hurt to the fish, and still it might depend upon whether it is carried off or not. If it accumulates in one place and becomes a nuisance -- but I am of the impression that the fish will eat it up mostly if it goes into the water.
- Q. Do the dog fish hover about the mouth of the Fraser River, or is the water too fresh there for them?
- A. Well, I rather think it is too fresh for them. They might be out around the sand heads some, but I don't think they bother the river much.
- Q. Do you think they prey on the runs of salmon to any extent; do they follow the salmon?
- A. I don't hardly think it. I think they follow the small fish more; herrang and other

small fish of that kind.

- Q. What would prey on the salmon?
- A. Well ---
- Q. Of course we know that the seal group does.
 - A. Yes, the seals do.
 - Q. Only would there be enough about here?
- A. No, I don't think they would make any big slaughter of them.
- Q. Have you ever noticed salmon far off shore?
- A. No; only just along the coast. We would troll and catch the cohos frequently from the vessels.
 - Q. Well off shore?
- A. No, not far off; just along the coast, by trolling.
- Q. How far have you been sealing; across to the Japan coast?
- A. No, I have not been to the Japan coast myself; only this coast and Bering Sea.
- Q. You have had no experience with the distribution of the seal except in the spring run north?
 - A. That is all

- Q. Have you never seen them in the fallout in the ocean?
- A. No; nothing to speak of. Along in December they come on the toast again generally.
- Q. But I mean as they go south, and they cross the lines of steamers running to Japan ofcourse?
 - A. Yes, sir.
 - Q. But you have never been over that far?
 - A. No, I have not.
- Q. Have you had more stormy weather this spring than usual, in connection with your fur seal fishing?
- A. It has not been any stormier than we have had other years, but we have years finer again. It is probably rougher than an average this season.
- Q. What is the cause of the very small catch of seals this year?
- A. It is on account of the weather. They have to have very good weather to catch seals.
- Q. Of course you can use fire arms off here, and I imagine most of the seals are taken with fire arms at the south.
 - A. Most of them are. When I went in the

business we used no fire arms at all. It was all natives.

- Q. When did they begin to take up fire arms?
 - A. About 1883 or 1884 I think.
- Q. What was it lead to the introduction of the fire arms?
- A. Oh, the whites; getting white hunters. They could not get experience with the spears and so started in shooting.
- Q. You can do just as well with the spears as with the fire arms can you?
- A. I think so. I think if they had left fire arms alone they would be just as well off.
 - Q. And you dont frighten the seals so much?
- A. No, and that is where it makes the difference you know.
- Q. I presume that there are a lot of anxious men waiting for tomorrow morning to begin.
- A. I suppose there is. Oh, yes; there will be a lot of them waiting.
- Q. They would have gone right into Bering Sea to-day would they not; being ahead of time?
 - A. I think likely they would.

- Q. They dont wait down at Sand (?) Point?
- A. I think they would wait ther just long enough to allow themselves time to get in there on time.
- Q. Have you ever done any fur sealing in Bering Sea?
 - A. Yes, sir.
- Q. What is your trouble with fog there?

 At what time of year is it most likely to be foggy?
- A. Well, I know it is foggy there most all summer. Of course some days will be clear.
- Q. Is it foggiest after the first or August or before?
- A. Well, we used not to go in there until the first of July anyway, and from the first of July until we left there would be foggy spells and clear spells all the way through -- sometimes the foggy days would last longer than others.
- Q. Is it true that the fogs may extend -that vessels 10 or 20 miles apart would experience very different weather?
 - A. Well, I should think so very likely.

The fog banks appear to be right straight up and down sometimes. It must be. If it was a continual thing all over the sea it would be a continual fog. It is the fog banks that they get into.

- Q. What causes the smals some years to be off in one direction from the Pribilof Islands and other years in another direction?
- A. I could not say, unless it is the fish they feed on.
- Q. Because it is so you cannot do any fishing in one direction and the next year all the seal are there.
- A. Yes; I think it must be in the fish they feed on.
- Q. Do you think the seals are going to hold out?
- A. Oh, I think so. Of course it depends on the rookeries. Down in South America they went on the rookeries and they ruined the business there.
- Q? All through the South Pacific wherever there were seal Islands?
- A. Yes. If the rookeries are not protected they certainly cannot hold out.

- Q. They slaughter them there by the hundreds of thousands every year.
 - A. Yes, sir.
- Q. I dont imagine there is a productive rookery in the South Pacific ocean now.
- A. No, I don't think there is any that amounts to anything.
- Q. New Zealand has within her territory some of the best rookery islands, and is trying to build them up.
- A. Yes; but it will take a good deal of work to build them up now, as they are so scarce.
- Q. The main question with the salt water fisheries is whether there is anything that demands attention now. Apart from the salmon there does not seem to be anything important.
- A. I dont think it, because I consider the market protects everything else.
 - Q. They are really undeveloped?
 - A. Yes, sir.
- Q. Do you think there is any perceptible decrease in the salmon yet?
- A. Well, we have the experience of the Columbia River and those places.

- Q. They hold pretty well in British
 Columbia, but still there is another thing to
 be taken into consideration; there is a great
 many more people fishing every year. Of course
 when you put in more men and boats they ought
 to catch more fish, if the fish are as plentiful
 Has it been your experience that they have these
 bad years regularly?
 - A. Oh, yes; it has always been so.
 - Q. Has it been regular?
- A. It has been pretty regular; 2 years good and 2 years bad, and the 2 years are generally regular, one will be better than the other, and the bad years are the same way. It has run pretty regularly that way.
- Q. Why not have a close year on the good year, the best year?
- A. Well, I kind of fancy that they are kind of a different run of the same salmon, comping the 4th year, and keeping that up regularly; that the chances are if you protect that one year exxxx and let the rest go you only protect that one year's run. I think they would all want some protection.

- Q. Of course there are persons who say that the difference in the years is due to the condition of the water during the time when the eggs are there.
- A. The condition of the water sometimes makes a difference in the catch; that is on account of being -- the higher the floods and the muddler the water is the easier they can catch the fish.
- Q. Yes, but what I meant was by destruction of eggs, etc.
 - A. Well, there might be something in that.